

ABSTRACT

In a processing apparatus, a process gas including a source gas (TiCl_4 , NH_3) and an inert gas (N_2) is supplied into a process chamber (2). A pressure meter (6) detects a pressure in the process chamber (2) so as to control an amount of flow of the process gas supplied to the process chamber (2) based on a result of the detection. A source gas is purged by the inert gas. By maintaining the amount of flow of the source gas constant and controlling the amount of flow of the inert gas, an amount of flow the entire process gas is controlled so as to maintain a pressure in the process chamber (2) constant. Since a time spent on evacuation of the source gas is reduced, a time for switching the source gas is reduced. Additionally, a temperature of a surface of a substrate during processing can be maintained constant.